Working with Selected classes from the Java API - 0

What will be the result of compiling and executing Test class?

```
import java.util.function.Predicate;

public class Test {
     public static void main(String[] args) {
         String [] arr = {"A", "ab", "bab", "Aa", "bb", "baba",
        "aba", "Abab"};

         Predicate<String> p = s ->
        s.toUpperCase().substring(0,1).equals("A");

         processStringArray(arr, p);
     }

     private static void processStringArray(String [] arr,
                                            Predicate<String>
         predicate) {
         for(String str : arr) {
             if(predicate.test(str)) {
                 System.out.println(str);
             }
         }
     }
}
```

A -

```
A
ab
Aa
aba
Abab
```

B - Runtime exception

C - Compilation error

D -

```
ab
aba
```

E -

```
A
Aa
Abab
```

Working with Selected classes from the Java API - 1

Consider below code:

```
//Test.java

import java.time.LocalDate;
import java.time.LocalTime;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.parse("1947-08-14");
         LocalTime time = LocalTime.MAX;
         System.out.println(date.atTime(time));
     }
}
```

What will be the result of compiling and executing Test class?

A - 1947-08-14T23:59:59.0

B - 1947-08-14T23:59:59.999999999

C - 1947-08-14T23:59:59

D - 1947-08-14T23:59:59.999

Working with Selected classes from the Java API - 2

Consider below code:

```java
//Test.java
package com.training.oca;

import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         String s = new String("Hello");
         List<String> list = new ArrayList<>();
         list.add(s);
         list.add(new String("Hello"));
         list.add(s);
         s.replace("l", "L");

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - [HeLLo, HeLLo, HeLLo]

B - [Hello, Hello, Hello]

C - [HeLLo, Hello, HeLLo]

D - [HeLLo, Hello, Hello]

Working with Selected classes from the Java API - 3

Consider below code:

```
//Test.java
import java.time.Period;

public class Test {
     public static void main(String [] args) {
         Period period = Period.of(0, 0, 0);
         System.out.println(period);
     }
}
```

What will be the result of compiling and executing Test class?

A - P0D

B - p0y0m0d

C - p0d

D - P0Y0M0D

Working with Selected classes from the Java API - 4

Consider code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<Character> list = new ArrayList<>();
         list.add(0, 'V');
         list.add('T');
         list.add(1, 'E');
         list.add(3, 'O');

         if(list.contains('O')) {
             list.remove('O');
         }

         for(char ch : list) {
             System.out.print(ch);
         }
     }
}
```

What will be the result of compiling and executing Test class?

A - VTEO

B - Runtime exception

C - VET

D - VTE

E - VETO

F - Compilation error

Working with Selected classes from the Java API - 5

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         String str1 = new String("Core");
         String str2 = new String("CoRe");
         System.out.println(str1 = str2);
     }
}
```

A - CoRe

B - false

C - Core

D - true

Working with Selected classes from the Java API - 6

Consider below code:

```
//Test.java
import java.time.LocalDate;

class MyLocalDate extends LocalDate {
     @Override
     public String toString() {
         return super.getDayOfMonth() + "-" + super.getMonthValue()
        +
            "-" +  super.getYear();
     }
}

public class Test {
     public static void main(String [] args) {
         MyLocalDate date = LocalDate.parse("1980-03-16");
         System.out.println(date);
     }
}
```

What will be the result of compiling and executing Test class?

A - 1980-03-16

B - 16-3-1980

C - An exception is thrown at runtime

D - 16-03-1980

E - Compilation error

Working with Selected classes from the Java API - 7

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

class Student {
     private String name;
     private int age;

     Student(String name, int age) {
         this.name = name;
         this.age = age;
     }

     public String toString() {
         return "Student[" + name + ", " + age + "]";
     }
}

public class Test {
     public static void main(String[] args) {
         List<Student> students = new ArrayList<>();
         students.add(new Student("James", 25));
         students.add(new Student("James", 27));
         students.add(new Student("James", 25));
         students.add(new Student("James", 25));

         students.remove(new Student("James", 25));

         for(Student stud : students) {
             System.out.println(stud);
         }
     }
}
```

What will be the result of compiling and executing Test class?

A -

```
Student[James, 25]
Student[James, 27]
Student[James, 25]
Student[James, 25]
```

B -

```
Student[James, 25]
Student[James, 27]
Student[James, 25]
```

C -

```
Student[James, 27]
Student[James, 25]
Student[James, 25]
```

D - Student[James, 27]

Working with Selected classes from the Java API - 8

Below is the code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String [] args) {
         List<Integer> list = new ArrayList<Integer>();
         list.add(new Integer(2));
         list.add(new Integer(1));
         list.add(new Integer(0));

         list.remove(list.indexOf(0));

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - [1, 0]

B - An exception is thrown at runtime

C - Compilation error

D - [2, 1]

Working with Selected classes from the Java API - 9

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
    public static void main(String[] args) {
        String[] names = { "Smith", "Brown", "Thomas", "Taylor",
        "Jones" };
        List<String> list = new ArrayList<>();
        for (int x = 0; x < names.length; x++) {
            list.add(names[x]);
            switch (x) {
                case 2:
                    continue;
            }
            break;
        }
        System.out.println(list.size());
    }
}
```

A - 0

B - 1

C - None of the other options

D - 5

E - 4

F - 2

G - 3

Working with Selected classes from the Java API - 10

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         StringBuilder sb = new StringBuilder("Java");
         String s1 = sb.toString();
         String s2 = sb.toString();

         System.out.println(s1 == s2);
     }
}
```

A - false

B - Compilation error

C - An exception is thrown at runtime

D - true

Working with Selected classes from the Java API - 11

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> dryFruits = new ArrayList<>();
         dryFruits.add("Walnut");
         dryFruits.add("Apricot");
         dryFruits.add("Almond");
         dryFruits.add("Date");

         Iterator<String> iterator = dryFruits.iterator();
         while(iterator.hasNext()) {
             String dryFruit = iterator.next();
             if(dryFruit.startsWith("A")) {
                 dryFruits.remove(dryFruit);
             }
         }

         System.out.println(dryFruits);
    }
}
```

What will be the result of compiling and executing Test class?

A - [Walnut, Apricot, Almond, Date]

B - An exception is thrown at runtime

C - [Walnut, Date]

D - Compilation error

Working with Selected classes from the Java API - 12

Consider below code:

```java
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
          LocalDate date = LocalDate.of(2020, 9, 31);
          System.out.println(date);
     }
}
```

What will be the result of compiling and executing Test class?

A - 2020-10-01

B - An exception is thrown at runtime

C - 2020-09-30

D - Compilation error

Working with Selected classes from the Java API - 13

What will be the result of compiling and executing Test class?

```
import java.time.LocalDate;
import java.time.Month;
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<LocalDate> dates = new ArrayList<>();
         dates.add(LocalDate.parse("2018-07-11"));
         dates.add(LocalDate.parse("1919-02-25"));
         dates.add(LocalDate.of(2020, 4, 8));
         dates.add(LocalDate.of(1980, Month.DECEMBER, 31));

         dates.removeIf(x -> x.getYear() < 2000);

         System.out.println(dates);
     }
}
```

A - [1919-02-25, 1980-12-31]

B - Runtime exception

C - [2018-07-11, 1919-02-25, 2020-04-08, 1980-12-31]

D - [2018-07-11, 2020-04-08]

Working with Selected classes from the Java API - 14

Consider below code:

```
//Test.java
import java.time.LocalDate;
import java.time.Period;
import java.time.format.DateTimeFormatter;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.of(2012, 1, 11);
         Period period = Period.ofMonths(2);
         DateTimeFormatter formatter =
        DateTimeFormatter.ofPattern("MM-dd-yy");
         System.out.print(formatter.format(date.minus(period)));
     }
}
```

What will be the result of compiling and executing Test class?

A - 11-11-12

B - 01-11-11

C - 01-11-12

D - Runtime exception

E - 11-11-11

Working with Selected classes from the Java API - 15

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         String str = "java";
         StringBuilder sb = new StringBuilder("java");

         System.out.println(str.equals(sb) + ":" + sb.equals(str));
     }
}
```

A - false:false

B - Compilation error

C - false:true

D - true:false

E - true:true

Working with Selected classes from the Java API - 16

Consider below code:

```
public class Test {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder(100);
        System.out.println(sb.length() + ":" +
         sb.toString().length());
    }
}
```

What will be the result of compiling and executing Test class?

A - 100:0

B - 16:0

C - 0:0

D - 16:16

E - 100:100

Working with Selected classes from the Java API - 17

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
import java.util.function.Predicate;

class Employee {
     private String name;
     private int age;
     private double salary;

     public Employee(String name, int age, double salary) {
         this.name = name;
         this.age = age;
         this.salary = salary;
     }

     public String getName() {
         return name;
     }

    public int getAge() {
         return age;
     }

    public double getSalary() {
         return salary;
     }

    public String toString() {
         return name;
     }
}

public class Test {
     public static void main(String [] args) {
         List<Employee> list = new ArrayList<>();
         list.add(new Employee("James", 25, 15000));
         list.add(new Employee("Lucy", 23, 12000));
         list.add(new Employee("Bill", 27, 10000));
         list.add(new Employee("Jack", 19, 5000));
         list.add(new Employee("Liya", 20, 8000));

         process(list, /*INSERT*/);

         System.out.println(list);
     }

     private static void process(List<Employee> list,
        Predicate<Employee> predicate) {
```

```
        Iterator<Employee> iterator = list.iterator();
        while(iterator.hasNext()) {
            if(predicate.test(iterator.next()))
            iterator.remove();
        }
    }
}
```

Which of the following lambda expressions, if used to replace /*INSERT*/, prints [Jack, Liya] on to the console? Select ALL that apply.

A - e -> e.getSalary() >= 10000

B - e - > e.getSalary() >= 10000

C - e -> { e.getSalary() >= 10000 }

D - (Employee e) -> { return e.getSalary() >= 10000; }

E - (e) -> { e.getSalary() >= 10000; }

Working with Selected classes from the Java API - 18

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> list1 = new ArrayList<>();
         list1.add("A");
         list1.add("D");

         List<String> list2 = new ArrayList<>();
         list2.add("B");
         list2.add("C");

         list1.addAll(1, list2);

         System.out.println(list1);
     }
}
```

What will be the result of compiling and executing Test class?

A - [A, B, C, D]

B - [A, D, B, C]

C - [A, B, C]

D - [A, D]

Working with Selected classes from the Java API - 19

Consider below code:

```
//Test.java
import java.time.LocalDateTime;

public class Test {
     public static void main(String [] args) {
         LocalDateTime obj = LocalDateTime.now();
         System.out.println(obj.getSecond());
     }
}
```

Which of the following statement is correct?

A - Code fails to compile

B - Code compiles successfully but throws Runtime exception

C - It will print any int value between 1 and 60

D - It will print any int value between 0 and 59

Working with Selected classes from the Java API - 20

Consider below code:

```
//Test.java
import java.util.ArrayList;

class Counter {
     int count;
     Counter(int count) {
         this.count = count;
     }

     public String toString() {
         return "Counter-" + count;
     }
}

public class Test {
     public static void main(String[] args) {
         ArrayList<Counter> original = new ArrayList<>();
         original.add(new Counter(10));

         ArrayList<Counter> cloned = (ArrayList<Counter>)
        original.clone();
         cloned.get(0).count = 5;

         System.out.println(original);
     }
}
```

What will be the result of compiling and executing Test class?

A - [Counter-10]

B - Compilation error

C - [Counter-5]

D - An exception is thrown at runtime

Working with Selected classes from the Java API - 21

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
    public static void main(String [] args) {
        LocalDate newYear = LocalDate.of(2018, 1, 1);
        LocalDate christmas = LocalDate.of(2018, 12, 25);
        boolean flag1 = newYear.isAfter(christmas);
        boolean flag2 = newYear.isBefore(christmas);
        System.out.println(flag1 + ":" + flag2);
    }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - An exception is thrown at runtime

C - false:true

D - true:false

Working with Selected classes from the Java API - 22

Consider below code:

```
//Test.java

class SpecialString {
    String str;
    SpecialString(String str) {
        this.str = str;
    }
}

public class Test {
    public static void main(String[] args) {
        Object [] arr = new Object[4];
        for(int i = 1; i <=3; i++) {
            switch(i) {
                case 1:
                    arr[i] = new String("Java");
                    break;
                case 2:
                    arr[i] = new StringBuilder("Java");
                    break;
                case 3:
                    arr[i] = new SpecialString("Java");
                    break;
            }
        }
        for(Object obj : arr) {
            System.out.println(obj);
        }
    }
}
```

What will be the result of compiling and executing Test class?

A -

```
Java
<Some text containing @ symbol>
<Some text containing @ symbol>
```

B -

```
null
Java
<Some text containing @ symbol>
<Some text containing @ symbol>
```

C -

```
Java
Java
```

```
<Some text containing @ symbol>
null
```

D -

```
null
Java
Java
Java
```

E -

```
null
Java
Java
<Some text containing @ symbol>
```

F -

```
Java
Java
<Some text containing @ symbol>
```

G -

```
Java
<Some text containing @ symbol>
<Some text containing @ symbol>
null
```

H -

```
Java
Java
Java
null
```

Working with Selected classes from the Java API - 23

A bank's swift code is generally of 11 characters and used in international money transfers. An example of swift code: ICICINBBRT4 ICIC: First 4 letters for bank code IN: Next 2 letters for Country code BB: Next 2 letters for Location code RT4: Next 3 letters for Branch code

Which of the following code correctly extracts country code from the swift code referred by String reference variable swiftCode?

A - swiftCode.substring(5, 6);

B - swiftCode.substring(4, 5);

C - swiftCode.substring(5, 7);

D - swiftCode.substring(4, 6);

Working with Selected classes from the Java API - 24

What will be the result of compiling and executing Test class?

```
public class Test {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder();
        System.out.println(sb.append(null).length());
    }
}
```

A - 4

B - 1

C - Compilation error

D - NullPointerException is thrown at runtime

Working with Selected classes from the Java API - 25

For the given code snippet:

List list = new /*INSERT*/();

Which of the following options, if used to replace /*INSERT*/, compiles successfully? Select ALL that apply.

A - `ArrayList<String>`

B - `List<>`

C - `List<String>`

D - `ArrayList<>`

Working with Selected classes from the Java API - 26

Consider below code:

```
//Test.java
public class Test {
    public static void main(String[] args) {
        String s1 = "OCAJP";
        String s2 = "OCAJP" + "";
        System.out.println(s1 == s2);
    }
}
```

What will be the result of compiling and executing Test class?

A - true

B - Compilation error

C - OCAJP

D - false

Working with Selected classes from the Java API - 27

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> list = new ArrayList<>();
         list.add("X");
         list.add("Y");
         list.add("X");
         list.add("Y");
         list.add("Z");
         list.remove(new String("Y"));
         System.out.println(list);
     }
}
```

A - [X, Z]

B - Compilation error

C - [X, X, Y, Z]

D - Exception is thrown at runtime

E - [X, X, Z]

F - [X, Y, Z]

Working with Selected classes from the Java API - 28

Consider below code:

```
//Test.java
import java.time.LocalDate;
import java.time.Period;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.parse("2000-01-01");
         Period period = Period.ofYears(-3000);
         System.out.println(date.plus(period));
     }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - -1000-01-01

C - 1000-01-01

D - Runtime exception

E - 5000-01-01

Working with Selected classes from the Java API - 29

What will be the result of compiling and executing Test class?

```
import java.util.function.Predicate;

public class Test {
     public static void main(String[] args) {
         String [] arr = {"*", "**", "***", "****", "*****"};
         Predicate pr1 = s -> s.length() < 4;
         print(arr, pr1);
     }

     private static void print(String [] arr, Predicate<String>
        predicate) {
         for(String str : arr) {
             if(predicate.test(str)) {
                 System.out.println(str);
             }
         }
     }
}
```

A - Compilation error

B -

```
*
**
***
****
```

C -

```
*
**
***
```

D -

```
*
**
***
****
*****
```

Working with Selected classes from the Java API - 30

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         StringBuilder sb = new StringBuilder("Java");
         String s1 = sb.toString();
         String s2 = "Java";

         System.out.println(s1 == s2);
     }
}
```

A - Compilation error

B - An exception is thrown at runtime

C - true

D - false

Working with Selected classes from the Java API - 31

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
import java.util.function.Predicate;

class Employee {
     private String name;
     private int age;
     private double salary;

     public Employee(String name, int age, double salary) {
         this.name = name;
         this.age = age;
         this.salary = salary;
     }

    public String getName() {
         return name;
     }

    public int getAge() {
         return age;
     }

    public double getSalary() {
         return salary;
     }

     public String toString() {
         return name;
     }
}

public class Test {
     public static void main(String [] args) {
         List<Employee> list = new ArrayList<>();
         list.add(new Employee("James", 25, 15000));
         list.add(new Employee("Lucy", 23, 12000));
         list.add(new Employee("Bill", 27, 10000));
         list.add(new Employee("Jack", 19, 5000));
         list.add(new Employee("Liya", 20, 8000));

         process(list, e -> e.getAge() > 20);
     }

     private static void process(List<Employee> list,
        Predicate<Employee> predicate) {
         Iterator<Employee> iterator = list.iterator();
         while(iterator.hasNext()) {
```

```
            Employee e = iterator.next();
            if(predicate.test(e))
                System.out.print(e + " ");
        }
    }
}
```

What will be the result of compiling and executing Test class?

A - James Lucy Bill

B - Compilation error

C - James Lucy Bill Jack Liya

D - Jack Liya

Working with Selected classes from the Java API - 32

Consider below code:

```
//Test.java
public class Test {
    public static void main(String[] args) {
        final String fName = "James";
        String lName = "Gosling";
        String name1 = fName + lName;
        String name2 = fName + "Gosling";
        String name3 = "James" + "Gosling";
        System.out.println(name1 == name2);
        System.out.println(name2 == name3);
    }
}
```

What will be the result of compiling and executing Test class?

A - true true

B - false true

C - false false

D - true false

Working with Selected classes from the Java API - 33

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;
import java.util.ListIterator;

public class Test {
     public static void main(String[] args) {
         List<String> dryFruits = new ArrayList<>();
         dryFruits.add("Walnut");
         dryFruits.add("Apricot");
         dryFruits.add("Almond");
         dryFruits.add("Date");

         ListIterator<String> iterator = dryFruits.listIterator();
         while(iterator.hasNext()) {
             if(iterator.next().startsWith("A")) {
                 iterator.remove();
              }
         }

         System.out.println(dryFruits);
     }
}
```

What will be the result of compiling and executing Test class?

A - [Walnut, Apricot, Almond, Date]

B - [Walnut, Date]

C - An exception is thrown at runtime

D - Compilation error

Working with Selected classes from the Java API - 34

What will be the result of compiling and executing Test class?

```
public class Test {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder("Hurrah! I Passed...");
        sb.delete(0, 100);
        System.out.println(sb.length());
    }
}
```

A - 0

B - 16

C - StringIndexOutOfBoundsException is thrown at runtime

D - 19

Working with Selected classes from the Java API - 35

Consider below code:

```
//Test.java
import java.util.ArrayList;

public class Test {
     public static void main(String[] args) {
         ArrayList<Integer> original = new ArrayList<>();
         original.add(new Integer(10));

         ArrayList<Integer> cloned = (ArrayList<Integer>)
         original.clone();
         Integer i1 = cloned.get(0);
         ++i1;

         System.out.println(cloned);
     }
}
```

What will be the result of compiling and executing Test class?

A - [10]

B - An exception is thrown at runtime

C - Compilation error

D - [11]

Working with Selected classes from the Java API - 36

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.parse("2018-1-01");
         System.out.println(date);
     }
}
```

What will be the result of compiling and executing Test class?

A - 2018-1-1

B - 2018-1-01

C - An exception is thrown at runtime

D - 2018-01-01

Working with Selected classes from the Java API - 37

What will be the result of compiling and executing Test class?

```
import java.time.LocalDate;
import java.time.Month;
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<LocalDate> dates = new ArrayList<>();
         dates.add(LocalDate.parse("2018-7-11"));
         dates.add(LocalDate.parse("1919-10-25"));
         dates.add(LocalDate.of(2020, 4, 8));
         dates.add(LocalDate.of(1980, Month.DECEMBER, 31));

         dates.removeIf(x -> x.getYear() < 2000);

         System.out.println(dates);
     }
}
```

A - [2018-07-11, 1919-02-25, 2020-04-08, 1980-12-31]

B - Runtime exception

C - [2018-07-11, 2020-04-08]

D - [1919-02-25, 1980-12-31]

Working with Selected classes from the Java API - 38

What will be the result of compiling and executing Test class?

```
public class Test {
    public static void main(String[] args) {
        m1(null);
    }

    static void m1(CharSequence s) {
        System.out.println("CharSequence");
    }

    static void m1(String s) {
        System.out.println("String");
    }

    static void m1(Object s) {
        System.out.println("Object");
    }
}
```

A - String

B - Compilation Error

C - Object

D - CharSequence

Working with Selected classes from the Java API - 39

Consider below code:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<StringBuilder> days = new ArrayList<>();
         days.add(new StringBuilder("Sunday"));
         days.add(new StringBuilder("Monday"));
         days.add(new StringBuilder("Tuesday"));

         if(days.contains(new StringBuilder("Sunday"))) {
             days.add(new StringBuilder("Wednesday"));
         }

         System.out.println(days.size());
     }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - Runtime exception

C - 4

D - 3

Working with Selected classes from the Java API - 40

Below is the code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String [] args) {
         List<Integer> list = new ArrayList<Integer>();

         list.add(27);
         list.add(27);

         list.add(new Integer(27));
         list.add(new Integer(27));

         System.out.println(list.get(0) == list.get(1));
         System.out.println(list.get(2) == list.get(3));
     }
}
```

What will be the result of compiling and executing Test class?

A - false true

B - true true

C - true false

D - false false

Working with Selected classes from the Java API - 41

Consider below code:

```
//Test.java
import java.time.Period;

public class Test {
     public static void main(String [] args) {
         Period period = Period.of(2, 1,
        0).ofYears(10).ofMonths(5).ofDays(2);
         System.out.println(period);
     }
}
```

What will be the result of compiling and executing Test class?

A - P2Y1M0D

B - P2D

C - P12Y6M2D

D - P2Y1M

Working with Selected classes from the Java API - 42

Consider the code snippet:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     List list1 = new ArrayList<String>(); //Line 5
     List<String> list2 = new ArrayList(); //Line 6
     List<> list3 = new ArrayList<String>(); //Line 7
     List<String> list4 = new ArrayList<String>(); //Line 8
     List<String> list5 = new ArrayList<>(); //Line 9
}
```

Which of the following statements compile without any warning? Select ALL that apply.

A - Line 9

B - Line 7

C - Line 8

D - Line 6

E - Line 5

Working with Selected classes from the Java API - 43

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         String str1 = " ";
         boolean b1 = str1.isEmpty();
         System.out.println(b1);
         str1.trim();
         b1 = str1.isEmpty();
         System.out.println(b1);
     }
}
```

A - true false

B - false false

C - false true

D - false true

E - true true

Working with Selected classes from the Java API - 44

Consider below code:

```
import java.util.function.Predicate;

public class Test {
     public static void main(String[] args) {
         String [] arr = {"A", "ab", "bab", "Aa", "bb", "baba",
        "aba", "Abab"};

         processStringArray(arr, /*INSERT*/);
     }

     private static void processStringArray(String [] arr,
                                            Predicate<String>
        predicate) {
         for(String str : arr) {
             if(predicate.test(str)) {
                 System.out.println(str);
             }
         }
     }
}
```

Which of the following options can replace /*INSERT*/ such that on executing Test class all the array elements are displayed in the output? Select ALL that apply.

A - p -> p.length() >= 1

B - p -> true

C - p -> p.length() < 10

D - p -> !false

Working with Selected classes from the Java API - 45

Consider below code:

```
//Test.java
import java.time.LocalDate;
import java.time.Period;
import java.time.format.DateTimeFormatter;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.of(2012, 1, 11);
         Period period = Period.ofMonths(2);
         DateTimeFormatter formatter =
        DateTimeFormatter.ofPattern("mm-dd-yy");
         System.out.print(formatter.format(date.minus(period)));
     }
}
```

What will be the result of compiling and executing Test class?

A - 01-11-12

B - 11-11-12

C - 11-11-11

D - Runtime exception

E - 01-11-11

Working with Selected classes from the Java API - 46

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate d1 = LocalDate.parse("1999-09-09");
         LocalDate d2 = LocalDate.parse("1999-09-09");
         LocalDate d3 = LocalDate.of(1999, 9, 9);
         LocalDate d4 = LocalDate.of(1999, 9, 9);
         System.out.println((d1 == d2) + ":" + (d2 == d3) + ":" + (d3
        == d4));
     }
}
```

What will be the result of compiling and executing Test class?

A - true:false:true

B - true:true:true

C - false:false:false

D - false:false:true

Working with Selected classes from the Java API - 47

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> list = new ArrayList<>();
         list.add(0, "Array");
         list.add(0, "List");

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - [List]

B - [List, Array]

C - An exception is thrown at runtime

D - [Array]

E - [Array, List]

Working with Selected classes from the Java API - 48

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> list = new ArrayList<>();
         list.add("ONE");
         list.add("TWO");
         list.add("THREE");
         list.add("THREE");

         if(list.remove(2)) {
             list.remove("THREE");
         }

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - An exception is thrown at runtime

C - [ONE, TWO, THREE, THREE]

D - [ONE, TWO, THREE]

E - [ONE, TWO]

Working with Selected classes from the Java API - 49

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

class Student {
     private String name;
     private int age;

     Student(String name, int age) {
         this.name = name;
         this.age = age;
     }

     public String toString() {
         return "Student[" + name + ", " + age + "]";
     }

     public boolean equals(Object obj) {
         if(obj instanceof Student) {
             Student stud = (Student)obj;
             if(this.name.equals(stud.name) && this.age == stud.age)
            {
                 return true;
             }
         }
         return false;
     }
}

public class Test {
     public static void main(String[] args) {
         List<Student> students = new ArrayList<>();
         students.add(new Student("James", 25));
         students.add(new Student("James", 27));
         students.add(new Student("James", 25));
         students.add(new Student("James", 25));

         students.remove(new Student("James", 25));

         for(Student stud : students) {
             System.out.println(stud);
         }
    }
}
```

What will be the result of compiling and executing Test class?

A - Student[James, 27]

B -

```
Student[James, 25]
Student[James, 27]
Student[James, 25]
```

C -

```
Student[James, 27]
Student[James, 25]
Student[James, 25]
```

D -

```
Student[James, 25]
Student[James, 27]
Student[James, 25]
Student[James, 25]
```

Working with Selected classes from the Java API - 50

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         String s1 = "OcA";
         String s2 = "oCa";
         System.out.println(s1.equals(s2));
     }
}
```

A - true

B - Compilation error

C - false

D - None of the other options

Working with Selected classes from the Java API - 51

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
    public static void main(String[] args) {
        List<String> list = new ArrayList<>();
        list.add(null);
        list.add(null);
        list.add(null);
        System.out.println(list.remove(0) + ":" +
         list.remove(null));
    }
}
```

A - null:true

B - true:false

C - true:true

D - NullPointerException is thrown at runtime

E - null:null

Working with Selected classes from the Java API - 52

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate newYear = LocalDate.of(2018, 1, 1);
         LocalDate eventDate = LocalDate.of(2018, 1, 1);
         boolean flag1 = newYear.isAfter(eventDate);
         boolean flag2 = newYear.isBefore(eventDate);
         System.out.println(flag1 + ":" + flag2);
     }
}
```

What will be the result of compiling and executing Test class?

A - true:true

B - false:true

C - false:false

D - true:false

Working with Selected classes from the Java API - 53

Consider below code of Test.java file:

```
import java.time.LocalDate;

public class Test {
    public static void main(String [] args) {
        LocalDate date = LocalDate.parse("2020-08-31");
        System.out.println(date.plusMonths(-6));
    }
}
```

What is the result?

A - Compilation error

B - 2020-02-29

C - 2020-02-30

D - 2020-02-31

E - 2020-02-28

F - An exception is thrown at runtime

Working with Selected classes from the Java API - 54

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.parse("1980-03-16");
         System.out.println(date.minusYears(-5));
     }
}
```

What will be the result of compiling and executing Test class?

A - 1985-03-16

B - Runtime exception

C - 1975-03-16

D - Compilation error

Working with Selected classes from the Java API - 55

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.of(2020, 9, 6);
         System.out.println(date);
     }
}
```

What will be the result of compiling and executing Test class?

A - 2020-06-09

B - 2020-6-9

C - 2020-09-06

D - 2020-9-6

Working with Selected classes from the Java API - 56

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate joiningDate = LocalDate.parse("2006-03-16");
         System.out.println(joiningDate.withDayOfYear(29));
     }
}
```

What will be the result of compiling and executing Test class?

A - None of the other options

B - 2006-03-29

C - 2006-01-01

D - 2006-01-29

Working with Selected classes from the Java API - 57

Consider below code:

```
//Test.java
import java.time.LocalDate;
import java.time.Month;
import java.time.Period;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.of(2000, Month.JANUARY, 1);
         Period period = Period.parse("p-30000y");
         System.out.println(date.plus(period));
     }
}
```

What will be the result of compiling and executing Test class?

A - 28000-01-01

B - Compilation error

C - -28000-01-01

D - Runtime exception

E - 32000-01-01

Working with Selected classes from the Java API - 58

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         String str = "Good"; //Line 3
         change(str); //Line 4
         System.out.println(str); //Line 5
     }

     private static void change(String s) {
         s.concat("_Morning"); //Line 9
     }
}
```

A - None of the other options

B - _Morning

C - Good_Morning

D - Good

Working with Selected classes from the Java API - 59

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> fruits = new ArrayList<>();
         fruits.add("apple");
         fruits.add("orange");
         fruits.add("grape");
         fruits.add("mango");
         fruits.add("banana");
         fruits.add("grape");

         if(fruits.remove("grape"))
             fruits.remove("papaya");

         System.out.println(fruits);
     }
}
```

A - An exception is thrown at runtime

B - [apple, orange, mango, banana]

C - [apple, orange, mango, banana, grape]

D - Compilation error

Working with Selected classes from the Java API - 60

Consider below code:

```
//Test.java
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;

public class Test {
    public static void main(String [] args) {
        LocalDate date = LocalDate.of(1987, 9, 1);
        String str = date.format(DateTimeFormatter.ISO_DATE_TIME);
        System.out.println("Date is: " + str);
    }
}
```

What will be the result of compiling and executing Test class?

A - Date is: 1987-09-01

B - Runtime exception

C - Date is: 01-09-1987

D - Date is: 1987-01-09

E - Given code executes successfully but output does not match with the given options

Working with Selected classes from the Java API - 61

What will be the result of compiling and executing Test class?

```
public class Test extends String {
     @Override
     public String toString() {
         return "TEST";
     }

     public static void main(String[] args) {
         Test obj = new Test();
         System.out.println(obj);
     }
}
```

A - Output string contains @ symbol

B - Compilation error

C - Exception is thrown at runtime

D - TEST

Working with Selected classes from the Java API - 62

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<StringBuilder> dryFruits = new ArrayList<>();
         dryFruits.add(new StringBuilder("Walnut"));
         dryFruits.add(new StringBuilder("Apricot"));
         dryFruits.add(new StringBuilder("Almond"));
         dryFruits.add(new StringBuilder("Date"));

         for(int i = 0; i < dryFruits.size(); i++)
         {
             if(i == 0) {
                 dryFruits.remove(new StringBuilder("Almond"));
             }
          }

         System.out.println(dryFruits);
     }
}
```

What will be the result of compiling and executing Test class?

A - [Walnut, Apricot, Almond, Date]

B - An exception is thrown at runtime

C - [Walnut, Apricot, Date]

D - [Walnut, Date]

Working with Selected classes from the Java API - 63

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> list = new ArrayList<>();
         list.add(0, "Array");
         list.set(0, "List");

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - [Array, List]

B - [List]

C - An exception is thrown at runtime

D - [Array]

E - [List, Array]

Working with Selected classes from the Java API - 64

Consider below code snippet:

```
public static void process(/*INSERT*/ list) {
     list.add(100); //Line 2
     int x = list.get(0); //Line 3
     System.out.println(list.size() + ":" + x);
}
```

Which of the following options, if used to replace /*INSERT*/, compiles successfully?

A - `List`

B - `List<int>`

C - `List<Integer>`

D - `List<Object>`

Working with Selected classes from the Java API - 65

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.parse("2018-06-06");
         date.minusDays(10);
         System.out.println(date);
     }
}
```

What will be the result of compiling and executing Test class?

A - 2018-06-26

B - 2018-06-25

C - 2018-05-27

D - 2018-06-06

E - 2018-05-26

Working with Selected classes from the Java API - 66

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<Integer> list = new ArrayList<>();
         list.add(110);
         list.add(new Integer(110));
         list.add(110);

         list.removeIf(i -> i == 110);
         System.out.println(list);
     }
}
```

A - [110, 110]

B - [110, 110, 110]

C - [110]

D - []

Working with Selected classes from the Java API - 67

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.parse("2000-06-25");
         while(date.getDayOfMonth() >= 20) {
             System.out.println(date);
             date.plusDays(-1);
         }
     }
}
```

What will be the result of compiling and executing Test class?

A - An exception is thrown at runtime

B - Compilation error

C - System.out.printin(date); is executed 6 times

D - System.out.printin(date); is executed more than 6 times

Working with Selected classes from the Java API - 68

Consider below code:

```
//Test.java
import java.time.LocalDate;
import java.time.Period;

public class Test {
     public static void main(String [] args) {
          LocalDate obj = new LocalDate(2020, 2, 14);
          System.out.println(obj.minus(Period.ofDays(10)));
     }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - Runtime exception

C - 2020-02-04

D - 2020-02-03

Working with Selected classes from the Java API - 69

What will be the result of compiling and executing Test class?

```
import java.util.function.Predicate;

public class Test {
     public static void main(String[] args) {
         printNumbers(i -> i % 2 != 0);
     }

     private static void printNumbers(Predicate<Integer> predicate)
         {
         for(int i = 1; i <= 10; i++) {
             if(predicate.test(i)) {
                 System.out.print(i);
             }
         }
     }
}
```

A - 246810

B - 13579

C - 12345678910

D - 1357911

E - 1234567891011

Working with Selected classes from the Java API - 70

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<Integer> list = new ArrayList<>();
         list.add(100);
         list.add(7);
         list.add(50);
         list.add(17);
         list.add(10);
         list.add(5);

         list.removeIf(a -> a % 10 == 0);

         System.out.println(list);
     }
}
```

A - Runtime Exception

B - [100, 7, 50, 17, 10, 5]

C - Compilation error

D - [100, 50, 10]

E - [7, 17, 5]

Working with Selected classes from the Java API - 71

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

class Student {
     private String name;
     private int age;

     Student(String name, int age) {
         this.name = name;
         this.age = age;
     }

     public String toString() {
         return "Student[" + name + ", " + age + "]";
     }

     public boolean equals(Student obj) {
         if(obj instanceof Student) {
             Student stud = (Student)obj;
             if(this.name.equals(stud.name) && this.age == stud.age)
            {
                 return true;
             }
         }
         return false;
     }
}

public class Test {
     public static void main(String[] args) {
         List<Student> students = new ArrayList<>();
         students.add(new Student("James", 25));
         students.add(new Student("James", 27));
         students.add(new Student("James", 25));
         students.add(new Student("James", 25));

         students.remove(new Student("James", 25));

         for(Student stud : students) {
             System.out.println(stud);
         }
     }
}
```

What will be the result of compiling and executing Test class?

A -

```
Student[James, 25]
```

```
Student[James, 27]
Student[James, 25]
```

B -

```
Student[James, 27]
Student[James, 25]
Student[James, 25]
```

C - Student[James, 27]

D -

```
Student[James, 25]
Student[James, 27]
Student[James, 25]
Student[James, 25]
```

Working with Selected classes from the Java API - 72

Consider below code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

interface Sellable {}
abstract class Animal {}
class Mammal extends Animal{}
class Rabbit extends Mammal implements Sellable{}

public class Test {
     {
         List<Animal> list = new ArrayList<>();
         list.add(new Rabbit());
     }
     {
         List<Animal> list = new ArrayList<>();
         list.add(new Mammal());
     }
     {
         List<Mammal> list = new ArrayList<>();
         list.add(new Rabbit());
     }
     {
         List<Sellable> list = new ArrayList<>();
         list.add(new Mammal());
     }
     {
         List<Sellable> list = new ArrayList<>();
         list.add(new Rabbit());
     }
}
```

Which of the following statement is true?

A - Only one initializer block causes compilation error.

B - Five initializer blocks cause compilation error.

C - Three initializer blocks cause compilation error.

D - Two initializer blocks cause compilation error.

E - Four initializer blocks cause compilation error.

Working with Selected classes from the Java API - 73

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         String str = "Java Rocks!";
         System.out.println(str.length() + " : " + str.charAt(10));
     }
}
```

A - Compilation error.

B - An exception is thrown at runtime.

C - 11 : !

D - 11 : s

Working with Selected classes from the Java API - 74

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<Boolean> list = new ArrayList<>();
         list.add(true);
         list.add(new Boolean("tRue"));
         list.add(new Boolean("abc"));

         if(list.remove(1)) {
             list.remove(1);
         }

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - [true, false]

B - [true]

C - Compilation error

D - An exception is thrown at runtime

E - [false]

Working with Selected classes from the Java API - 75

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         StringBuilder sb = new StringBuilder("SpaceStation");
         sb.delete(5, 6).insert(5, " S").toString().toUpperCase();
         System.out.println(sb);
     }
}
```

A - Space Station

B - Space Sation

C - SPACE SATION

D - SPACE STATION

Working with Selected classes from the Java API - 76

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> trafficLight = new ArrayList<>();
         trafficLight.add(1, "RED");
         trafficLight.add(2, "ORANGE");
         trafficLight.add(3, "GREEN");

         trafficLight.remove(new Integer(2));

         System.out.println(trafficLight);
     }
}
```

What will be the result of compiling and executing Test class?

A - [RED, GREEN]

B - [RED, ORANGE, GREEN]

C - Compilation error

D - An exception is thrown at runtime

E - [RED, ORANGE]

Working with Selected classes from the Java API - 77

Consider below code:

```java
//Test.java
public class Test {
    public static void main(String[] args) {
        final int i1 = 1;
        final Integer i2 = 1;
        final String s1 = ":ONE";

        String str1 = i1 + s1;
        String str2 = i2 + s1;

        System.out.println(str1 == "1:ONE");
        System.out.println(str2 == "1:ONE");
    }
}
```

What will be the result of compiling and executing Test class?

A - true true

B - false false

C - false true

D - true false

Working with Selected classes from the Java API - 78

What will be the result of compiling and executing Test class?

```
public class Test {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder(5);
        sb.append("0123456789");
        sb.delete(8, 1000);
        System.out.println(sb);
    }
}
```

A - An exception is thrown at runtime

B - 89

C - Compilation error

D - 01234567

Working with Selected classes from the Java API - 79

Consider below Lambda expression:

```
Predicate predicate = s -> true;
```

Which of the lambda expression can successfully replace the lambda expression in above statement?

A - s -> {true;}

B - s -> {return true;}

C - s -> {return true}

D - s -> {true}

Working with Selected classes from the Java API - 80

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> list = new ArrayList<>(4);
         list.add(0, "Array");
         list.add(2, "List");

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - [Array, null, List, null]

B - An exception is thrown at runtime

C - [Array, List]

D - Compilation error

Working with Selected classes from the Java API - 81

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         StringBuilder sb = new StringBuilder("Good"); //Line 3
         change(sb); //Line 4
         System.out.println(sb); //Line 5
     }

     private static void change(StringBuilder s) {
         s.append("_Morning"); //Line 9
     }
}
```

A - Good

B - Good_Morning

C - _Morning

D - None of the other options

Working with Selected classes from the Java API - 82

How many String objects are there in the HEAP memory, when control is at Line 9?

```
public class Test {
     public static void main(String[] args) {
         String s1 = new String("Java"); //Line 3
         String s2 = "JaVa"; //Line 4
         String s3 = "JaVa"; //Line 5
         String s4 = "Java"; //Line 6
         String s5 = "Java"; //Line 7

         int i = 1; //Line 9

     }
}
```

A - 4

B - 3

C - 2

D - 5

Working with Selected classes from the Java API - 83

What will be the result of compiling and executing Test class?

```
import java.util.function.Predicate;

public class Test {
     public static void main(String[] args) {
         String [] arr = {"*", "**", "***", "****", "*****",
        "******"};
         Predicate<String> pr1 = s -> s.length() < 4;
         print(arr, pr1);
     }

     private static void print(String [] arr, Predicate<String>
        predicate) {
         for(String str : arr) {
             if(predicate.test(str)) {
                 System.out.println(str);
             }
         }
     }
}
```

A -

```
*
**
***
****
```

B -

```
*
**
***
```

C -

```
*
**
***
****
*****
******
```

D -

```
****
*****
******
```

Working with Selected classes from the Java API - 84

Below is the code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

abstract class Animal {}
class Dog extends Animal{}

public class Test {
     public static void main(String [] args) {
         List<Animal> list = new ArrayList<Dog>();
         list.add(0, new Dog());
         System.out.println(list.size() > 0);
     }
}
```

What will be the result of compiling and executing Test class?

A - Runtime exception

B - Compilation error

C - true

D - false

Working with Selected classes from the Java API - 85

What will be the result of compiling and executing Test class?

```
public class Test {
     public static void main(String[] args) {
         String fName = "James";
         String lName = "Gosling";
         System.out.println(fName = lName);
     }
}
```

A - None of the other options

B - false

C - true

D - Compilation error

Working with Selected classes from the Java API - 86

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate date1 = LocalDate.parse("1980-03-16");
         LocalDate date2 = LocalDate.parse("1980-03-16");
         System.out.println(date1.equals(date2) + " : " +
        date1.isEqual(date2));
     }
}
```

What will be the result of compiling and executing Test class?

A - true : true

B - false : true

C - true: false

D - false : false

Working with Selected classes from the Java API - 87

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         Boolean [] arr = new Boolean[2];
         List<Boolean> list = new ArrayList<>();
         list.add(arr[0]);
         list.add(arr[1]);

         if(list.remove(0)) {
             list.remove(1);
         }

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - ArrayIndexOutOfBoundsException is thrown at runtime

B - []

C - [false]

D - Compilation error

E - NullPointerException is thrown at runtime

F - [true]

Working with Selected classes from the Java API - 88

Which of the following will give you current system time? Select 2 options.

A -

```
System.out.println(LocalDateTime.now());
```

B -

```
System.out.println(new LocalDate());
```

C -

```
System.out.println(LocalDate.now());
```

D -

```
System.out.println(new LocalTime());
```

E -

```
System.out.printin(LocalTime.now());
```

F -

```
System.out.println(new LocalDateTime());
```

Working with Selected classes from the Java API - 89

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> dryFruits = new ArrayList<>();
         dryFruits.add("Walnut");
         dryFruits.add("Apricot");
         dryFruits.add("Almond");
         dryFruits.add("Date");

         for(String dryFruit : dryFruits) {
             if(dryFruit.startsWith("A")) {
                 dryFruits.remove(dryFruit);
             }
         }

         System.out.println(dryFruits);
     }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - [Walnut, Date]

C - An exception is thrown at runtime

D - [Walnut, Apricot, Almond, Date]

Working with Selected classes from the Java API - 90

Which of the following method is declared in Predicate interface?

A - boolean validate(T t);

B - boolean test(T t);

C - boolean verify(T t);

D - boolean check(T t);

Working with Selected classes from the Java API - 91

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> fruits = new ArrayList<>();
         fruits.add("apple");
         fruits.add("orange");
         fruits.add("grape");
         fruits.add("mango");
         fruits.add("banana");
         fruits.add("grape");

         if(fruits.remove("grape"))
             fruits.remove("apple");

         System.out.println(fruits);
     }
}
```

A - [orange, grape, mango, banana]

B - [orange, mango, banana, grape]

C - Compilation error

D - An exception is thrown at runtime

Working with Selected classes from the Java API - 92

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate date = LocalDate.of(2068, 4, 15);
         System.out.println(date.getMonth() + ":" +
        date.getMonthValue());
     }
}
```

What will be the result of compiling and executing Test class?

A - April:4

B - April:3

C - APRIL:3

D - APRIL:4

Working with Selected classes from the Java API - 93

Consider below code:

```
//Test.java
import java.time.LocalTime;

public class Test {
     public static void main(String [] args) {
         LocalTime time = LocalTime.of(23, 60);
         System.out.println(time);
     }
}
```

What will be the result of compiling and executing Test class?

A - 23:60

B - An exception is thrown at runtime

C - 00:01

D - 00:00

E - Compilation error

Working with Selected classes from the Java API - 94

Consider below code:

```
//Test.java
public class Test {
    public static void main(String[] args) {
        String javaworld = "JavaWorld";
        String java = "Java";
        String world = "World";
        java += world;
        System.out.println(java == javaworld);
    }
}
```

What will be the result of compiling and executing Test class?

A - World

B - Java

C - JavaWorld

D - false

E - true

Working with Selected classes from the Java API - 95

Consider below code:

```
//Test.java
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         StringBuilder sb = new StringBuilder("Hello");
         List<StringBuilder> list = new ArrayList<>();
         list.add(sb);
         list.add(new StringBuilder("Hello"));
         list.add(sb);
         sb.append("World!");

         System.out.println(list);
     }
}
```

What will be the result of compiling and executing Test class?

A - [HelloWorld!, Hello, HelloWorld!]

B - [HelloWorld!, Hello, Hello]

C - [HelloWorld!, HelloWorld!, HelloWorld!]

D - [Hello, Hello, Hello]

Working with Selected classes from the Java API - 96

Consider code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<Character> list = new ArrayList<>();
         list.add(0, 'V');
         list.add('T');
         list.add(1, 'E');
         list.add(3, 'O');

         if(list.contains('O')) {
             list.remove(3);
         }

         for(char ch : list) {
             System.out.print(ch);
         }
     }
}
```

What will be the result of compiling and executing Test class?

A - VETO

B - VTEO

C - Runtime error

D - VTE

E - Compilation error

F - VET

Working with Selected classes from the Java API - 97

Consider below code:

```
//Test.java
import java.time.LocalDate;
import java.time.format.DateTimeFormatter;

public class Test {
     public static void main(String [] args) {
         LocalDate date1 = LocalDate.parse("1947-08-15",
        DateTimeFormatter.ISO_DATE);
         LocalDate date2 = LocalDate.parse("1947-08-15",

        DateTimeFormatter.ISO_LOCAL_DATE);
         LocalDate date3 = LocalDate.of(1947, 8, 15);

         System.out.println(date1.equals(date2) + " : " +
        date2.equals(date3));
     }
}
```

What will be the result of compiling and executing Test class?

A - true : true

B - false : false

C - false : true

D - Runtime exception

E - true : false

Working with Selected classes from the Java API - 98

What will be the result of compiling and executing Test class?

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         Integer i = 10;
         List<Integer> list = new ArrayList<>();
         list.add(i);
         list.add(new Integer(i));
         list.add(i);

         list.removeIf(i -> i == 10);

         System.out.println(list);
     }
}
```

A - [10, 10]

B - Compilation Error

C - [10, 10, 10]

D - [10]

E - []

Working with Selected classes from the Java API - 99

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder("B"); //Line n1
        sb.append(sb.append("A")); //Line n2
        System.out.println(sb); //Line n3
    }
}
```

What will be the result of compiling and executing Test class?

A - BAB

B - AB

C - BABA

D - BA

E - ABBA

F - ABAB

G - ABA

H - Compilation error at Line n2

Working with Selected classes from the Java API - 100

Consider below code:

```
//Test.java
import java.time.Period;

public class Test {
     public static void main(String [] args) {
         Period period = Period.of(0, 1000, 0);
         System.out.println(period);
     }
}
```

What will be the result of compiling and executing Test class?

A - p0y1000m0d

B - P0Y1000M0D

C - P1000M

D - p1000m

Working with Selected classes from the Java API - 101

Consider below code:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
     public static void main(String[] args) {
         List<String> days = new ArrayList<>();
         days.add("SUNDAY");
         days.add("SUNDAY");
         days.add("MONDAY");
         System.out.println(days.size());
         days.clear();
         System.out.println(days.size());
     }
}
```

What will be the result of compiling and executing Test class?

A - 2 0

B - 3 3

C - 3 0

D - An exception is thrown at runtime

Working with Selected classes from the Java API - 102

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate obj = LocalDate.now();
         System.out.println(obj.getHour());
     }
}
```

Which of the following statement is correct?

A - It will print any int value between 0 and 23

B - Code fails to compile

C - Code compiles successfully but throws Runtime exception

D - It will print any int value between 1 and 24

Working with Selected classes from the Java API - 103

DateTimeFormatter is defined inside which package?

A - java.time.format

B - java.time

C - java.util

D - java.text

Working with Selected classes from the Java API - 104

Which of the method of String class is used to remove leading and trailing white spaces?

A - ltrim()

B - trim()

C - rtrim()

D - trimBoth()

Working with Selected classes from the Java API - 105

Consider below code:

```
//Test.java
import java.time.LocalDate;

public class Test {
     public static void main(String [] args) {
         LocalDate obj = LocalDate.now();
         System.out.println(obj.getHour());
     }
}
```

Which of the following statement is correct?

A - It will print any int value between 0 and 23

B - Code fails to compile

C - Code compiles successfully but throws Runtime exception

D - It will print any int value between 1 and 24

Working with Selected classes from the Java API - 106

DateTimeFormatter is defined inside which package?

A - java.time.format

B - java.time

C - java.util

D - java.text

Working with Selected classes from the Java API - 107

Which of the method of String class is used to remove leading and trailing white spaces?

A - ltrim()

B - trim()

C - rtrim()

D - trimBoth()

Working with Selected classes from the Java API - 108

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        String word = "REBUS";
        /* INSERT */
        System.out.println(word);
    }
}
```

Following options are available to replace /*INSERT*/:

1. word = word.substring(2);
2. word = word.substring(2, 4);
3. word = word.substring(2, 5);
4. word = word.replace(“RE”, ““);
5. word = word.substring(2, 6);
6. word = word.delete(0, 2);

How many of the above options can be used to replace /*INSERT*/ (separately and not together) such that given command prints BUS on to the console?

A - Four options only

B - One option only

C - Three options only

D - All 6 options

E - Five options only

F - Two options only

Working with Selected classes from the Java API - 109

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        String str = "ALASKA";
        System.out.println(str.charAt(str.indexOf("A") + 1));
    }
}
```

What will be the result of compiling and executing Test class?

A - L

B - S

C - Runtime error

D - K

E - A

Working with Selected classes from the Java API - 110

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        /*INSERT*/ x = 7, y = 200;
        System.out.println(String.valueOf(x + y).length());
    }
}
```

Which of the following options, if used to replace /*INSERT*/, will compile successfully and on execution will print 3 on to the console?

Select ALL that apply.

A - double

B - long

C - byte

D - float

E - int

F - short

Working with Selected classes from the Java API - 111

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder("TOMATO");
        System.out.println(sb.reverse().replace("O", "A")); //Line
         n1
    }
}
```

What will be the result of compiling and executing Test class?

A - TOMATO

B - OTAMOT

C - TAMATA

D - OTAMAT

E - ATAMAT

F - Compilation error

G - TAMATO

Working with Selected classes from the Java API - 112

Given code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
    public static void main(String[] args) {
        List<StringBuilder> list = new ArrayList<>();
        list.add(new StringBuilder("AAA")); //Line n1
        list.add(new StringBuilder("BBB")); //Line n2
        list.add(new StringBuilder("AAA")); //Line n3

        list.removeIf(sb -> sb.equals(new StringBuilder("AAA")));
        //Line n4
        System.out.println(list);
    }
}
```

What will be the result of compiling and executing Test class?

A - [BBB]

B - []

C - [AAA, BBB, AAA]

D - None of the other options

E - [BBB, AAA]

Working with Selected classes from the Java API - 113

Consider below code of Test.java file:

```
class A {
    public String toString() {
        return null;
    }
}

public class Test {
    public static void main(String [] args) {
        String text = null;
        text = text + new A(); //Line n1
        System.out.println(text.length()); //Line n2
    }
}
```

What will be the result of compiling and executing Test class?

A - Line n2 causes Runtime error

B - Line ni causes Runtime error

C - 4

D - Line n1 causes compilation error

E - 8

F - 0

Working with Selected classes from the Java API - 114

Consider below code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
    public static void main(String[] args) {
        List<String> list = new ArrayList<>();
        list.add("P");
        list.add("O");
        list.add("T");

        List<String> subList = list.subList(1, 2); //Line n1
        subList.set(0, "E"); //Line n2
        System.out.println(list);
    }
}
```

What will be the result of compiling and executing Test class?

A - Compilation error

B - [P, O, T]

C - An exception is thrown by Line n2

D - [P, E, T]

Working with Selected classes from the Java API - 115

Consider below code snippet:

```
import java.util.*;

class Father {}

class Son extends Father {}

class GrandSon extends Son {}

abstract class Super {
    abstract List<Father> get();
}

class Sub extends Super {
    /*INSERT*/
}
```

And the definitions of get() method:

1. List get() {return null;}
2. ArrayList get() {return null;}
3. List get() {return null;}
4. ArrayList get() {return null;}
5. List get() {return null;}
6. ArrayList get() {return null;}
7. List get() {return null;}
8. ArrayList get() {return null;}

How many definitions of get() method can replace /*INSERT*/ such that there is no compilation error?

A - Three definitions

B - One definition

C - Five definitions

D - Seven definitions

E - Six definitions

F - Eight definitions

G - Two definitions

H - Four definitions

Working with Selected classes from the Java API - 116

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        String s1 = "OCP";
        String s2 = "ocp";
        System.out.println(/*INSERT*/);
    }
}
```

Which of the following options, if used to replace /*INSERT*/, will compile successfully and on execution will print true on to the console?

Select ALL that apply.

A - s1.length() == s2.length()

B - s1.contentEquals(s2)

C - s1.equals(s2.toUpper())

D - s1.equalsignoreCase(s2)

E - s1.equals(s2)

F - s2.equals(s1.toLower())

Working with Selected classes from the Java API - 117

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        boolean flag1 = "Java" == "Java".replace('J', 'J'); //Line n1
        boolean flag2 = "Java" == "Java".replace("J", "J"); //Line n2
        System.out.println(flag1 && flag2);
    }
}
```

What will be the result of compiling and executing Test class?

A - true

B - false

C - Line n1 causes compilation error

D - Line n2 causes compilation error

Working with Selected classes from the Java API - 118

Consider below code of Test.java file:

```
import java.time.LocalDate;

public class Test {
    public static void main(String [] args) {
        LocalDate date = LocalDate.parse("1983-06-30");
        System.out.println(date.plusMonths(8));
    }
}
```

What is the result?

A - 1983-02-30

B - 1983-02-28

C - 1984-02-28

D - An exception is thrown at runtime

E - 1984-02-30

F - 1983-02-29

G - 1984-02-29

Working with Selected classes from the Java API - 119

Consider below code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
    public static void main(String[] args) {
        List<Integer> list = new ArrayList<>();
        byte b = 10;
        list.add(b); //Line n1
        int mul = list.get(0) * list.get(0); //Line n2
        System.out.println(mul);
    }
}
```

What will be the result of compiling and executing Test class?

A - Line n2 causes compilation error

B - Line n1 causes compilation error

C - 10

D - 100

E - An exception is thrown at runtime

Working with Selected classes from the Java API - 120

Consider below code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
    public static void main(String[] args) {
        List<String> list;
        list = new ArrayList<>(); //Line n1
        list.add("A");
        list.add("E");
        list.add("I");
        list.add("O");
        list.add("U");
        list.addAll(list.subList(0, 4)); //Line n2
        System.out.println(list);
    }
}
```

What will be the result of compiling and executing Test class?

A - Line n1 causes compilation error

B - [A, E, I, O, U, A, E, I, O]

C - [A, E, I, O, U]

D - Line n2 causes compilation error

E - An exception is thrown at runtime by Line n2

F - [A, E, I, O, U, A, E, I, O, U]

Working with Selected classes from the Java API - 121

Consider below code of Test.java file:

```
public class Test {
    public static void main(String [] args) {
        String text = "ONE ";
        System.out.println(text.concat(text.concat("ELEVEN
        ")).trim());
    }
}
```

What will be the result of compiling and executing Test class?

A - ONE ONE ELEVEN

B - ONE ELEVEN

C - ONE ELEVEN ONE ELEVEN

D - ONE ELEVEN ONE

Working with Selected classes from the Java API - 122

Consider below code of Test.java file:

```
public class Test {
    public static void main(String [] args) {
        String text = "RISE ";
        text = text + (text = "ABOVE ");
        System.out.println(text);
    }
}
```

What will be the result of compiling and executing Test class?

A - RISE RISE ABOVE

B - RISE ABOVE RISE

C - RISE ABOVE

D - ABOVE ABOVE

Working with Selected classes from the Java API - 123

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        String str = "Game on"; //Line n1
        StringBuilder sb = new StringBuilder(str); //Line n2

        System.out.println(str.contentEquals(sb)); //Line n3
        System.out.println(sb.contentEquals(str)); //Line n4
        System.out.println(sb.equals(str)); //Line n5
        System.out.println(str.equals(sb)); //Line n6
    }
}
```

Which of the following statements is correct?

A - No compilation error

B - Four statements cause compilation error

C - Only one statement causes compilation error

D - Two statements cause compilation error

E - Three statements cause compilation error

Working with Selected classes from the Java API - 124

Below is the code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;

public class Test {
    public static void main(String[] args) {
        List<String> places = new ArrayList<>();
        places.add("Austin");
        places.add("Okinawa");
        places.add("Giza");
        places.add("Manila");
        places.add("Batam");
        places.add("Giza");

        if(places.remove("Giza"))
            places.remove("Austin");

        System.out.println(places);
    }
}
```

What will be the result of compiling and executing Test class?

A - [Austin, Okinawa, Manila, Batam]

B - [Okinawa, Giza, Manila, Batam]

C - Compilation error

D - [Okinawa, Manila, Batam, Giza]

E - An exception is thrown at runtime

F - [Okinawa, Manila, Batam]

G - [Austin, Okinawa, Giza, Manila, Batam, Giza]

H - [Austin, Okinawa, Manila, Batam, Giza]

Working with Selected classes from the Java API - 125

Consider below code fragment:

```
String place = "MISSS";
System.out.println(place.replace("SS", "T"));
```

What is the output?

A - MIST

B - MIT

C - MITS

D - MISSS

Working with Selected classes from the Java API - 126

Given code of Test.java file:

```
import java.util.ArrayList;
import java.util.List;
import java.util.function.Predicate;

public class Test {
    public static void main(String[] args) {
        List<String> words = new ArrayList<>();
        words.add("A");
        words.add("an");
        words.add("the");
        words.add("when");
        words.add("what");
        words.add("Where");
        words.add("whether");

        processStringArray(words, /*INSERT*/);
    }

    private static void processStringArray(List<String> list,
        Predicate<String> predicate) {
        for(String str : list) {
            if(predicate.test(str)) {
                System.out.println(str);
            }
        }
    }
}
```

Which of the following options can replace /*INSERT*/ such that on executing Test class all the list elements are displayed in the output?

Select ALL that apply.

A - p -> true

B - (String p) -> p.length() < 100

C - String p -> p.length() > 0

D - p -> !!!!true

E - p -> p.length() >= 1

F - p -> p.length() < 7

G - p -> !!false

Working with Selected classes from the Java API - 127

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        String str = "PANIC";
        StringBuilder sb = new StringBuilder("THET");
        System.out.println(str.replace("N", sb)); //Line n1
    }
}
```

What will be the result of compiling and executing Test class?

A - PATHETIC

B - Line n1 throws error at runtime

C - PANIC

D - Line n1 causes compilation error

Working with Selected classes from the Java API - 128

Consider below code of Test.java file:

```
public class Test {
    public static void main(String[] args) {
        String [] arr = {"1st", "2nd", "3rd", "4th", "5th"};
        String place = "faraway";
        System.out.println(arr[place.indexOf("a", 3)]); //Line n1
    }
}
```

What will be the result of compiling and executing Test class?

A - An exception is raised by Line n1

B - 3rd

C - 2nd

D - 1st

E - 4th

F - 5th